

S/N 10/763,663

Atty Dkt No. GP-303632 (GM-0432PUS)

Listing of Claims

1. (original) A vehicle having a forward end including a conduit spaced from a support surface for the vehicle, said conduit having a source of air under pressure and is spaced sufficiently from any normal abutment on said support surface to avoid said abutment and operable to project a curtain of air from said forward end toward said support surface with sufficient flow and direction to form a virtual airdam sufficiently to reduce vehicle drag.

2. (original) The vehicle of claim 1 including a series of ports in the conduit for projecting the curtain of air.

3. (original) The vehicle of claim 1 including a slit in the conduit for projecting the curtain of air.

4. (original) The vehicle of claim 1 wherein the source of air is a fan or blower.

5. (original) The vehicle of claim 1 wherein the operation of the source of air is adjustable.

6. (original) The vehicle of claim 1 including a fuel cell and a radiator in an air flow communication with said source of air under pressure, and a shroud connected to said source of air and configured to form the conduit.

7. (currently amended) A vehicle having a forward end enclosing an engine needing cooling air flow and including a conduit spaced from a support surface for the vehicle, said conduit substantially extending transversely across the forward end of the vehicle and having a source of air pressure and spaced sufficiently from any normal abutment on said support surface to avoid said abutment and operable to project a curtain of air from said forward end toward said support surface with sufficient flow and direction to form a virtual airdam sufficiently to reduce vehicle drag while maintaining said cooling air flow for said engine.

S/N 10/763,663

Atty Dkt No. GP-303632 (GM-0432PUS)

8. (original) The vehicle of claim 7 including a series of ports in the conduit for projecting the curtain of air.

9. (original) The vehicle of claim 7 including a slit in the conduit for projecting the curtain of air.

10. (original) The vehicle of claim 7, wherein the source of air is a fan or blower.

11. (original) The vehicle of claim 10 including a radiator in air flow communication with said fan or blower.

12. (currently amended) A method of reducing drag and increasing volumetric airflow for cooling in a moving vehicle's engine compartment positioned above a vehicle support comprising:

forming an air conduit substantially across the forward end of said vehicle to form a jet-forming outlet positioned to direct the air in a downward direction away from said compartment and toward said vehicle support; and

supplying air through said conduit in a sufficient volume to said jet-forming outlet to form a virtual airdam at least partially between said engine compartment and said vehicle support which sufficiently intercepts an air stream created by the moving vehicle to reduce vehicle drag.

13. (currently amended) A virtual airdam assembly for a movable support on a roadway and comprising an elongated conduit configured to be supportable on the underside of a front end portion of the movable support, said conduit configured to extend transversely across said front end portion and having an inlet opening configured for receiving air and an outlet

S/N 10/763,663

Atty Dkt No. GP-303632 (GM-0432PUS)

opening configured to project a jet of air in a downward direction toward said roadway, whereby to form a virtual airdam with the air received to reduce drag on the movable support.

14. (original) The virtual airdam assembly of claim 13 wherein the movable support is a vehicle front engine compartment adapted to receive ram air and the outlet of the conduit is configured to project a curtain of air away from the engine compartment with sufficient flow to increase volumetric air flow for cooling in said engine compartment.

15. (original) The virtual airdam assembly of claim 13 including a blower for supplying at least a portion of the air received by said inlet opening of said conduit.